THAT WHICH IS CLAIMED

1. An isolated nucleic acid molecule having a nucleotide sequence selected from the group consisting of:

a) the nucleotide sequence set forth in SEQ ID NO:1;

b) a nucleotide sequence encoding the amino acid sequence set forth in SEQ ID NO:2;

c) a nucleotide sequence having at least about 90 % sequence identity to the nucleotide sequence set forth in SEQ ID NO:1, wherein said nucleotide sequence having at least about 90% sequence identity to the nucleotide sequence set forth in SEQ ID NO:1 encodes a polypeptide having *Bt* toxin binding activity;

d) a nucleotide sequence having at least about 95 % sequence identity to the nucleotide sequence set forth in SEQ ID NO:1, wherein said nucleotide sequence having at least about 95% sequence identity to the nucleotide sequence set forth in SEQ ID NO:1 encodes a polypeptide having *Bt* toxin binding activity;

e) a nucleotide sequence that hybridizes to the complement of the nucleotide sequence set forth in SEQ ID NO:1 under stringent conditions, wherein said nucleotide sequence that hybridizes to the complement of the nucleotide sequence set forth in SEQ ID NO:1 under stringent conditions encodes a polypeptide having *Bt* toxin binding activity;

f) the nucleotide sequence of the cDNA insert of the plasmid deposited with the ATCC as Patent Deposit No. PTA-4935; and

g) a nucleotide sequence complementary to at least one nucleotide sequence set forth in a), b), c), d), e), and f).

2. The nucleic acid molecule of claim 1, wherein said nucleic acid molecule comprises a nucleotide sequence encoding a polypeptide having Cry1A toxin binding activity.

3. The nucleic acid molecule of claim 2, wherein said nucleic acid molecule comprises a nucleotide sequence encoding a polypeptide having Cry1A(b) toxin binding activity.

4. An isolated polypeptide having the amino acid sequence selected from the group consisting of:

a) the amino acid sequence set forth in SEQ ID NO:2;

b) the amino acid sequence of a sequence variant of the amino acid sequence set forth in SEQ ID NO:2, wherein said sequence variant has *Bt* toxin binding activity and shares at least about 90% sequence identity with the amino acid sequence set forth in SEQ ID NO:2;

c) the amino acid sequence of a sequence variant of the amino acid sequence set forth in SEQ ID NO:2, wherein said sequence variant has *Bt* toxin binding activity and shares at least about 95% sequence identity with the amino acid sequence set forth in SEQ ID NO:2; and

d) an amino acid sequence encoded by a nucleotide sequence according to claim 1.

5. A fusion polypeptide comprising the polypeptide of claim 4 and at least one polypeptide of interest.

6. The fusion polypeptide of claim 5, wherein said polypeptide of interest is a toxin receptor.

7. An expression cassette comprising a nucleotide sequence encoding the fusion polypeptide of claim 5, wherein said nucleotide sequence is operably linked to a promoter that drives expression in a cell of interest.

8. An antibody preparation specific for the polypeptide of claim 4.

9. An expression cassette comprising at least one nucleotide sequence according to claim 1, wherein said nucleotide sequence is operably linked to a promoter that drives expression in a cell of interest.

10. The expression cassette of claim 9, wherein said cell of interest is selected from the group consisting of insect cells and mammalian cells.

11. The expression cassette of claim 9, wherein said cell of interest is a microorganism.

12. The expression cassette of claim 11 wherein said microorganism is selected from the group consisting of yeast and bacteria.

13. A transformed cell of interest having stably incorporated within its genome a nucleotide sequence selected from the group consisting of:

a) the nucleotide sequence set forth in SEQ ID NO:1;

b) a nucleotide sequence encoding the amino acid sequence set forth in SEQ ID NO:2;

c) a nucleotide sequence having at least about 90 % sequence identity to the nucleotide sequence set forth in SEQ ID NO:1, wherein said nucleotide sequence having at least about 90% sequence identity to the nucleotide sequence set forth in SEQ ID NO:1 encodes a polypeptide having *Bt* toxin binding activity;

d) a nucleotide sequence having at least about 95 % sequence identity to the nucleotide sequence set forth in SEQ ID NO:1, wherein said nucleotide sequence having at least about 95% sequence identity to the nucleotide sequence set forth in SEQ ID NO:1 encodes a polypeptide having *Bt* toxin binding activity;

e) a nucleotide sequence that hybridizes to the complement of the nucleotide sequence set forth in SEQ ID NO:1 under stringent conditions, wherein said nucleotide sequence that hybridizes to the complement of the nucleotide sequence set forth in SEQ ID NO:1 under stringent conditions encodes a polypeptide having *Bt* toxin binding activity;

f) the nucleotide sequence of the cDNA insert of the plasmid deposited with the ATCC as Patent Deposit No PTA-4935; and

g) a nucleotide sequence complementary to at least one nucleotide sequence set forth in a), b), c), d), e), f), or g).

14. The transformed cell of claim 13, wherein said cell is a plant cell.

15. The transformed cell of claim 14, wherein said plant cell is monocotyledonous.

16. A method for screening test compounds to identify compounds that bind to a polypeptide of claim 4, said method comprising:

a) providing at least one polypeptide according to claim 4;

b) contacting said polypeptide with one or more test compounds under conditions promoting the binding of the test compound to the polypeptide; and

c) determining whether the test compound binds to the polypeptide.

17. The method of claim 16, wherein said method comprises the additional steps of:

a) contacting the polypeptide with a control ligand; and

b) comparing the binding characteristics of the test compound to those of the control ligand.

18. A method for screening test compounds to identify a compound that binds to a polypeptide of claim 4, said method comprising:

a) providing a cell expressing at least one polypeptide according to claim 4;

b) contacting said cell with one or more test compounds under conditions promoting the binding of the test compound to the polypeptide; and

c) determining whether the test compound binds to the polypeptide.

19. The method of claim 18, wherein said method comprises the additional steps of:

a) contacting a cell expressing at least one polypeptide of claim 4 with a control ligand; and

b) comparing the binding characteristics of the test compound to those of the control ligand.

20. The method of claim 18, wherein said method comprises the additional steps of contacting a cell expressing at least one polypeptide of claim 4 with a control ligand, and determining viability of the cell contacted with the test compound relative to the cell contacted with a control ligand.